San Jacinto Comments

Task 2

On page 9, the draft report discusses that the estimated maximum scour depth for the area south of the I-10 bridge, but also states that "[t]he estimated uncertainty in this maximum scour depth is =/- 2.5 ft (0.76 m)." On page 10, the report states that maximum scour depths never exceeded 1.5 feet on any location on the cap – is there a similar estimated uncertainty for this scour depth number?

Task 5 and 6

These tasks include a discussion of the problems of long-term reliability of Northwestern Area based on its current slope. The draft report recommends that the slope in the Northwestern Area be flattened, but does not provide much discussion about how this will be accomplished or issues that will need to be resolved. In particular, the weight of rock needed to flatten this slope will press into the soft sediment, potentially leading to releases and instability.

Quote from p. 43

"The releases from the armor cap would not pose concerns for toxicity and bioaccumulation because the releases would be much less than background releases outside the cap where resuspension of particles with sorbed contaminant is on-going along with diffusion." The fact that there may be other releases outside of the capped area does not affect the issue of whether the cap in this area is reliable long-term or whether releases are of concern.

Does Table 16-9 (Total Contaminant Release over 500-yr Simulation Period) reflect releases in the Northwestern Area with its current slope or a flattened slope?

Task 7

After discussing the potential loss of large portions of the cap in the worst-case Hurricane Ike/1994 flood scenario, the report on page 50 states:

"Impact of Substrate Material Erosion

The modeling performed of the October 1994 100-year flood event demonstrated that there was no substantial erosion of the cap's substrate material. The worse case scenario defined above might cause significant erosion of the substrate, but it would be speculative and not technically defensible to definitively say that it would."

Having stated that significant portions of the cap would be removed, with estimates of the percentage of the cap affected, why can't the analysis used in Task 14 to quantify resuspension of sediment be used to estimate potential losses?

The draft report also states on page 50, discussing the impact of armor rock erosion from the 1994 flood, that the Corps found no dislodgment and subsequent movement of large armor rocks across the surface of the cap. Is this also true for the worst-case Hurricane Ike/1994 flood scenario?

Task 8

The Executive Summary states that "Task 8 showed a low probability of barge strikes that would impact the integrity of the cap." In the discussion in Task 8, page 52, probabilities for barge strike are given are given as the probability in any given year. What is the probability of barge strikes over the 500 year period?

On page 57, the draft report states that "[f]lood conditions occur only about 1% of the time; therefore, the probability of a strike under these conditions is much lower than under normal flow conditions." The draft report also states on page 52 that "most of the strikes occur during high flow or storm conditions." If most strikes occur during high flow or storm conditions, is it relevant that those conditions only occur 1% of the time and does it affect the probability of a strike?

Tasks 11 and 12

Different estimates for different scenarios are given for contaminant loss during removal activities as part of these tasks and in the Executive Summary. The draft report suggests that flocculants and activated carbon be used to reduce losses. Were the use of flocculants and activated carbon considered in deriving any of the estimates of contaminant loss?

Task 14

From page 153, the purpose of Task 14 was to "[p]rovide a model evaluation of the full removal Alternative 6N identified in the Feasibility Study as well any new alternative(s) developed under Task 12 (Identify and evaluate techniques ...) above." The "[modeling was performed of the full removal Alternative 6N included representing the post-dredged elevations in the northern impoundments and a 1 cm layer of dredging sediment residuals on the surface of the newly exposed sediment bed in the Eastern Cell and Northwestern Area." Does this analysis represent modelling of the relatively short period between dredging and cover placement? – if so, that should be clarified. Why was the modeling done of the surface of the newly exposed sediment bed when a double layer cover was recommended? Also, did the analysis in Task 14 include excavation of the shallow areas of the Eastern Cell in the dry, an option discussed in the draft report, or in the wet?

On page 154, statements are made about the time necessary for natural recovery of the site (two decades/at least a decade), statements repeated in the Executive Summary. What is the basis for these estimates?